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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/930,123	08/14/2001	Harold O. Schwartz	3790-60721	9401

7590 08/26/2003

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EXAMINER

MAYEKAR, KISHOR

ART UNIT

PAPER NUMBER

1753

DATE MAILED: 08/26/2003

12

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/930,123	SCHWARTZ ET AL.	
	Examiner	Art Unit	
	Kishor Mayekar	1753	

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.

- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.

- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.

- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 05 June 2003.

2a) This action is FINAL.                            2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1-4 and 6-21 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-4 and 6-21 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on Oct. 4, 2002 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All b) Some \* c) None of:  
1. Certified copies of the priority documents have been received.  
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____	6) <input type="checkbox"/> Other: _____

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's response to restriction requirement in Paper No. 9 is acknowledged. The response has a request of rejoining groups I and III on the ground(s) that a search of the relevant class for either group would encompass a search of the class for the other group. This is found persuasive and the examiner will examine both groups, claims 1-4 and 6-21.

### *Information Disclosure Statement*

2. The information disclosure statement filed December 6, 2001 fails to comply with 37 CFR 1.98(a)(1), which requires a list of all patents, publications, or other information submitted for consideration by the Office. It has been placed in the application file, but the information referred to therein has not been considered.

*Claim Rejections - 35 USC § 112*

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-4 and 6-20 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a negative ion generator having an enclosed inner surface and an exposed outer surface, does not reasonably provide enablement for a negative ion generator having an enclosed surface with a separate opposite exposed surface. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention commensurate in scope with these claims.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-14 and 6-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, the phrase "an enclosed charged surface and an opposite exposed surface are confusing as to the relation of the recited surfaces to negative ion generator.

*Claim Rejections - 35 USC § 103*

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-4, 6-11, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over SHOJI (6,508,982) in view of STONE et al. (4,918,568). SHOJI's invention is directed to an air-cleaning apparatus wherein air is cleaned

with an air flow containing negative ions and ozone. SHOJI discloses in col. 9, lines 19-24 and lines 34-41, an embodiment which comprises a combination of an air cleaning apparatus, a titanium dioxide evaporated plate and an ultraviolet lamp as an apparatus performing deodorization, sterile filtration, sterilization and freshness-keeping operation. The difference between SHOJI and the above claims is the use of a negative ion generator of the type recited. STONE, a reference cited by Applicant, shows an air quality control system relying on generators which supply negative ions for the air purification wherein the generator is of the type recited (Figs. 2-3 and col. 5, lines 25-37). The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified SHOJI's teachings as suggested by STONE because the selection of any known equivalent generators for cleaning air flow with negative ions would be within the level of ordinary skill in the art.

As to the subject matters of claims 2,3 and 7, SHOJI clearly discloses the subject matters in col. 4, lines 25-45.

As to the subject matter of claim 4, SHOJI discloses in col. 8, lines 57-65 the use of a control unit to operate the air-cleaning apparatus.

As to the subject matter of claim 10, the selection of the amount of TiO<sub>2</sub> would be within the level of ordinary skill in the art.

As to claim 21, the further difference is the method of operating the device. The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the reference's teachings because the manner in which an apparatus operates is not germane to the issue of patentability of the apparatus itself. *Ex parte Wikdah* 10 USPQ 2d 1546 (BPAI 1989); *Ex parte McCullough* 7 USPQ 2d 1889 (BPAI 1988); *In re Finterswalder* 168 USPQ 530 (CCPA 1971); *In re Casey* 152 USPQ 235 (CCPA 1967).

9. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over SHOJI '982 as modified by STONE '568 as applied to claims 1-4, 9-11, 20 and 21 above, and further in view of KORIN (6,464,868). The difference between the references applied above and the instant claim is the provision of a top surface of the housing with a translucent portion. KORIN shows in a device with the use of an ultraviolet light that the light is enclosed in a housing made of quartz or translucent plastic (col. 5, lines 64-67). The subject matter as a whole would have

been obvious to one having ordinary skill in the art at the time the invention was made to have modified the references' teachings as suggested by KORIN because the selection of any known equivalent material for the housing, even a portion of the top surface of the housing, would be within the level of ordinary skill in the art.

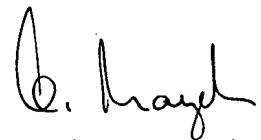
10. Claims 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over SHOJI '982 as modified by STONE '568 as applied to claims 1-4, 9-11, 20 and 21 above, and further in view of AUSTIN (5,707,594). The differences between the references applied above and the instant claim are each of the subject matters recited. AUSTIN shows the use of the electrical power in a system for control pathogen with UV light and a tray shaped to received a portion of light rays (see abstract and Figs. 1-2). The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the references' teachings as suggested by AUSTIN because the selection of any known equivalent electrical power and its mounting as well as to the shape of the tray would be within the level of ordinary skill in the art.

*Allowable Subject Matter*

11. Claims 13 and 14 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
12. The following is a statement of reasons for the indication of allowable subject matter: Because the prior art references do not disclose in a multi-function air treatment apparatus the provision of the recited component mount in combination with other recited structures as claimed in claim 13.
13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kishor Mayekar whose telephone number is (703) 308-0477. The examiner can normally be reached on Monday-Thursday.  
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (703) 308-3322. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

  
Kishor Mayekar  
Primary Examiner  
Art Unit 1753

KM